

Don't answer that cell phone!

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A PATIENT IN THE ICU was receiving epinephrine via infusion pump when a visitor received a call on his cell phone. When he answered, the pump increased the rate of the drip. The patient received an unintended bolus of medication and subsequently developed epinephrine toxicity.

What went wrong?

Under certain conditions, cell phone radio transmissions can cause electromagnetic interference (EMI) and disrupt the function of electrically powered medical devices—in this case, the infusion pump. Although EMI-related patient injuries are relatively rare, sources of electromagnetic energy such as radio signals, AC power line disruptions, and electrostatic discharge can disrupt medical device performance.

Although many medical devices are tested for EMI and meet applicable performance standards, some may still be susceptible to potentially serious problems in certain situations.

What precautions can you take?

- Educate yourself and your colleagues about the potential for EMI with medical devices and learn how to recognize and report problems.
- Develop and follow policies and procedures to ensure electromagnetic compatibility, especially in areas where critical care devices are used. For more information, refer to the Food and Drug Administration's Web site at <http://www.fda.gov/cdrh/emc/index.html>.
- Manage the use of radio transmitters near electrically powered medical devices. Post signs prohibiting cell phone use where necessary. Make sure all patients, visitors, and staff members understand and adhere to these policies.
- If a death, injury, or device malfunction occurs because of actual or suspected EMI, notify the person responsible for reporting such problems or submit an adverse event report to MedWatch (at the numbers below or report on-line at <http://www.fda.gov/medwatch>). ①

Although you need to support the adverse event-reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling MedWatch at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements in this report are those of the authors and may not reflect the views of the Department of Health and Human Services. Beverly Albrecht Gallauresi, RN, BS, MPH, coordinates Device Safety.

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